

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	
Mark A. FELKEY et al.	Conf. No.: 9669
Application No.: 10/051,180	Group Art Unit: 2154
Filed: January 22, 2002	Examiner: Nguyen, D.
Customer No.: 25537	
Attorney Docket: WMA01004	
Client Docket: 09710-1124	

For: METHOD AND SYSTEM FOR PROVIDING SOFTWARE INTEGRATION FOR A
TELECOMMUNICATIONS SERVICES ON-LINE PROCUREMENT SYSTEM

APPEAL BRIEF

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated December 13, 2005, and in response to the Notification of Non-Compliant Appeal Brief dated January 9, 2007.

I. REAL PARTY IN INTEREST

MCI, Inc. is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF THE CLAIMS

Claims 1-40 are pending in this appeal. No claim is allowed. This appeal is therefore taken from the final rejection of claims 1-40 on August 10, 2005.

IV. STATUS OF AMENDMENTS

No amendment to the claims has been filed since the final rejection of claims 1-40 on August 10, 2005.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER**Independent system claim 1.**

Independent claim 1 is directed to a system for providing software integration for on-line procurement of telecommunications offerings. (*See, e.g., Specification, ¶ 2*) The claimed system comprises a web tier configured to receive a request or a user action from a web server. (*See, e.g., Specification ¶¶ 8, 9, 10 and 47*) The system comprises an application tier coupled to the web tier and configured to perform order management (*See e.g., Specification ¶¶ 44, 48, 50 and FIG. 5*), online ordering or user management functions (*See e.g., Specification ¶¶ 8, 9, 10, 50, 51 and 60*), wherein the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications (*See e.g., Specification ¶¶ 9, 10, 51, 60, 61 and 65*) offerings on-line and custom software objects (*See e.g., Specification ¶¶ 8, 9, 10 and 68*) created to support procuring of the telecommunications offerings on-line (*See e.g., Specification ¶¶ 2 and 8*).

Independent method claim 20.

Independent claim 20 is directed to a method for providing software integration for on-line procurement of telecommunications offerings. (*See, e.g., Specification, ¶ 2*) The claimed method comprises receiving a request or a user action from a web server in a web tier. (*See, e.g., Specification ¶¶ 8, 9, 10 and 47*) The method comprises performing order management (*See e.g., Specification ¶¶ 44, 48, 50 and FIG. 5*), online ordering or user management functions in an application tier (*See e.g., Specification ¶¶ 8, 9, 10, 50, 51 and 60*). The method comprises extending software objects from general-purpose software objects in the web tier or the application tier to support procuring of the telecommunications offerings on-line. (*See e.g., Specification ¶¶ 9, 10, 51, 60, 61 and 65*) The method further comprises creating custom software (*See e.g., Specification ¶¶ 8, 9, 10 and 68*) objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line. (*See e.g., Specification ¶¶ 2 and 8*)

Independent means plus function claim 40.

Independent claim 40 is directed to a system for providing software integration for on-line procurement of telecommunications offerings. (*See, e.g., Specification, ¶ 2*) The system comprises means for (*See, e.g., Specification ¶¶ 8, 9, 10, 47, 52, 55, 93, 102, 116 and 129*) receiving a request or a user action from a web server in a web tier. The system comprises means for (*See e.g., Specification ¶¶ 8, 9, 10, 50, 60, 67, 68 and 99*) performing order management, online ordering or user management functions in an application tier. (*See e.g., Specification ¶¶ 8, 9, 10, 50, 60, 67, 68 and 99*) The system comprises means for (*See e.g., Specification ¶¶ 9, 10, 51, 60, 61, 65, 66, 69 and 117*) extending software objects from general-purpose software objects

in the web tier or the application tier to support procuring of the telecommunications offerings on-line (*See e.g.*, Specification ¶¶ 8, 9 and 10). The system further comprising means for (*See e.g.*, Specification ¶¶ 8, 9, 10 and 68) creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line. (*See e.g.*, Specification ¶¶ 2, 8, 9, 10 and 145)

Dependent claims argued separately in the appeal.

Domain objects to handle the ordering functionality (e.g., Cygent's ordering functionality domain objects, etc.) were extended and a custom CMI and pricing adapter as an extension to a pricing scheme (e.g., Cygent's pricing scheme, etc.) were designed. Activity objects also referred to as managers or controllers (e.g., Cygent managers or controllers, etc.) are used to coordinate the ordering activities and functions. Business rules (e.g., Cygent, etc.) to constrain the ordering activities as needed are also employed. Existing database 532 tables (e.g., Cygent, etc.) are used to persist online ordering data. Additional tables are designed to extend such schema. Such tables are also mapped to display objects and domain objects (e.g., using a TopLink for Java tool, etc.). (*See, e.g.*, specification, ¶ 51, claims 2-5, 20-24 and 40)

Pre-qualifying a customer 302, 304 or 306 for products and/or services employs an application to make a call out to the SAT 508, which is, for example, Common Object Request Broker Architecture (CORBA) based. A custom CMI and adapter was designed to handle that function. (*See, e.g.*, specification, ¶ 52, claims 3 and 5)

The presentation tier includes a web controller, which is a Java Servlet acting as a traffic cop that is responsible for routing requests to the appropriate Java server page (JSP) files or transition policy objects. The transition policies are Java objects, which provide navigation and

validation logic. The JSPs are essentially HTML files with embedded Java code for display of dynamic content. A JSP tag library is used to facilitate the use of display objects and display policies that can handle process logic to display a page. The display objects are read-only lightweight objects that shadow domain objects. In that respect, a display object may represent a subset or all of the domain objects attributes. Furthermore, a display object may be mapped to one or more domain objects in order to reduce network traffic and object distribution. Once used, the display objects are discarded. (See, e.g., specification, ¶ 55, claims 2-5 and 21-24)

The following description applies to custom software developed according to the present invention, for example, including Java Server Pages (JSPs), Java objects (e.g., such as transition policies, display policies, etc.), session bean control objects, domain objects, etc. Order management, MCD/Supp, order tracking, and order submission functionality is supported using, for example, a common set of domain classes. These classes, where possible, leverage Cygent's class framework. This results in a smaller set of custom classes to be implemented and also enhances the robustness and maintainability of the web site. Figures 5b-5g describe exemplary custom classes, according to the present invention. A Rose model is used to display the classes in their UML format. The Cygent classes are noted as such. (See, e.g., specification, ¶ 68, claims 3, 5, 22 and 24, *see also*, specification, ¶¶ 73, 75-77, 84-85, 93, 103, 105, 108-116, 120-125, claims 6-19 and 25-39)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-40 are obvious under 35 U.S.C. § 103(a) based on *Crawford* (U.S. 6,014,651) in view of *Elsbree* (U.S. 6,834,388).

VII. ARGUMENT**A. CLAIMS 1-40 ARE NOT OBVIOUS OVER CRAWFORD IN VIEW OF ELSBREE.**

Well-settled case law holds that the words of a claim must be read as they would be interpreted by those of ordinary skill in the art. *In re Baker Hughes Inc.*, 215 F.3d 1297, 55 USPQ2d 1149 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); M.P.E.P. 2111.01. “Although the PTO must give claims their broadest reasonable interpretation, this interpretation must be consistent with the one that those skilled in the art would reach.” *In re Cortright*, 165 F.3d 1353, 1369, 49 USPQ2d 1464, 1465 (Fed. Cir. 1999).

The Administrative Procedures Act (APA) mandates the Patent Office to make the necessary findings and provide an administrative record showing the evidence on which the findings are based, accompanied by the reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000). In particular, the Patent Office must articulate and place on the record the “common knowledge” used to negate patentability. *In re Zurko*, *id.*; *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).

The rejection of claims 1-40 is respectfully traversed because *Crawford* and *Elsbree* neither teach nor suggest the features of the claims.

1. Independent claims 1, 20, and 40 are not obvious over Crawford in view of Elsbree.

More particularly, independent claims 1, 20, and 40 each recite **software objects extended “from general-purpose software objects” in “the web tier or the application tier” to support procurement of “the telecommunications offerings on-line.”**

For example, independent claim 1 recites, “A system for providing software integration for **on-line procurement of telecommunications offerings**, comprising: a **web tier** configured to receive a request or a user action from a web server; and **an application tier coupled to the web tier** and configured to perform order management, online ordering or user management functions, wherein **the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications offerings on-line** and custom software objects created to support procuring of the telecommunications offerings on-line.” Independent claim 20 recites, “A method for providing software integration for **on-line procurement of telecommunications offerings**, comprising: receiving a request or a user action from a web server **in a web tier**; performing order management, online ordering or user management functions **in an application tier**; **extending software objects from general-purpose software objects** in the web tier or the application tier **to support procuring of the telecommunications offerings on-line**; and creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line.” Independent claim 40 recites, “A system for providing software integration for **on-line procurement of telecommunications offerings**, comprising: means for receiving a request or a user action from a web server **in a web tier**; means for performing order management, online ordering or user management functions **in an application tier**; means for **extending software objects from general-purpose software objects** in the web tier or the application tier **to support procuring of the telecommunications offerings on-line**; and means for creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line.”

In stark contrast, *Crawford* (per “FIELD OF THE INVENTION”, col. 1: 10-19) is directed to providing an on-line service that supplies **automated information processing services** to computer users for a fee. The automated information processing services include, for example, an on-line service that allows remote computer users to connect on-line to computer devices (e.g., “virtual” disks) and access them to do such things as run computer software from them. The Examiner (Office Action dated August 10, 2005, p. 2) contends that the “web tier” recited by claim 1 is taught by *Crawford* at col. 27: 48-54. However, the cited portion of *Crawford* states:

Every time a drive is mounted on one system (including virtual disks mounted on the replica server 160), the drive needs to be configured (mounted) as a remote disk on the other computer. The Replica Server On-line Session Control process sends and receives configuration requests to cause drive mounts and dismounts on both computers.

However, this cited portion of *Crawford* makes no suggestion of any “web tier” as recited by claim 1. The Examiner (Office Action dated August 10, 2005, p. 3) further contends that the “application tier coupled to the web tier” recited by claim 1 is taught by *Crawford* at col. 16: 57-65 and col. 46: 62 – col. 47: 14. However, at col. 16: 57 - col. 17: 5, *Crawford* states:

FIG. 4 shows that data link 150 may comprise up to three different “layers” of connection: the first layer or sub-link connects host computer 104 to switching station 124a; the second “layer” connects switching station 124a to switching station 124b; and the third “layer” connects switching station 124b to a customer computer 50. A customer may connect the on-line service system 100 by many different methods. These methods may evolve as advances in telecommunications become available. For example, each of the various layers may comprise any of ISDN link, LAN/WAN connect, a “front end controller,” another computer, a telephone company connection, a direct connection, a fiber optic link, a cable television link, cellular link, a satellite link, a radio frequency link and/or a PDN connection. The three layers can also comprise varying cable mediums and software bridges, gateways, routers and/or emulations.

This cited portion of *Crawford* makes no suggestion of any “application tier coupled to the web tier” as recited by claim 1. At col. 46: 62 – col. 47: 14, *Crawford* discusses host

computer 104 beginning a host task request 912 to manage host based requests on behalf of customers, which may be signaled or responded to by generating requests to replica computer 160. Once all of these tasks are in place, host computer 104 enters a loop where it is constantly checking and waiting for connects from customer computers 50 and off-line replica computer 160 in order to begin on-line sessions and/or off-line replica computer 160 sessions.

The Examiner (Office Action dated August 10, 2005, p. 3) then apparently contends that “software objects to support procurement of the telecommunications offerings on-line” is taught by *Crawford* at col. 16: 57 – col. 17: 5, col. 18: 16-22, and col. 19: 9-17. However, the additional portions of *Crawford* cited here merely refer to “virtual disk drives” by which a customer computer 50 can efficiently access remotely located computer storage by a data link 150 (col. 18: 29-34). In the Advisory Action dated November 10, 2005 (item 11, no. 2), the Examiner further states, “Crawford discloses a system for providing multiple services to customers [Figures 2; and col. 14, lines 43 – col 15, lines 62] which customers can do online purchase [Figure 8; col 28, lines 29-44; and col 30, lines 29-64].” However, the “services” discussed by *Crawford* at col. 14: 43 – col. 15: 62 appear to specifically involve accessing virtual disk drives. The “online purchase” referenced by the Examiner refers to an On-line Service Customer Signup Process. At col. 28: *Crawford* states (*emphasis added*):

FIG. 8A offers an overview of on-line service control software **executed within the on-line service host processor**.

Block 400 shows the On-line Service Customer Signup Process. **Access is provided by dialing a special charge telephone number (block 400A)**. A message is displayed describing the services and charges for signup, and the amount of time left to exit before a signup charge is issued (block 400B). If the customer stays connected and responds to signup information, a user ID/password is assigned, software and control information is downloaded to the customer computer 50, and customer control information is stored on the host system 100 (block 400C). This control process can be performed by the on-line service computer 104 or the replica server computer 160. The latter is preferable because

the link to the signup computer can be performed with standard communications software.

Thus, the customer signup process is implemented differently from the access to the virtual disk drive which the Examiner cites in the Office Action's discussion of the rejection with regard to the "web tier" and the "application tier" recited by claim 1. Thus, *Crawford* fails to suggest or disclose any "application tier coupled to the web tier" or any type of "**on-line procurement of telecommunications offerings**" as recited by claim 1.

Elsbree fails to cure the deficiencies of *Crawford* in this regard. Although the Office Action fails to accurately track the recited language of claim 1, the Examiner (Office Action dated August 10, 2005, p. 3) apparently correctly acknowledges that *Crawford* does not teach "wherein the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications offerings on-line and custom software objects created to support procuring of the telecommunications offerings on-line" as recited by claim 1, but contends that this feature is taught by *Elsbree* at col. 6: 12-39.

However, *Elsbree* (per col. 1: 14-16) is directed to development, creation, and use of software for process control, specifically ActiveX controls that are OPC compliant. *Elsbree* (per col. 2: 1-8) is concerned with a software development toolkit to ease the task of connecting a computer and a machine to allow them to communicate according to a standard communication protocol for process control. The toolkit allows a user to produce the necessary real-time interactive control and communication software objects, such as ActiveX controls, that are used in connecting and interoperating the control computer and the machines. At col. 6: 12-39, *Elsbree* states:

FIG. 3 depicts a schematic of the internal organization of the client-side of process control software objects which may be created pursuant to the invention. One or more real-time interactive control and communication software objects 40

are inserted into an application software object called a container 42. The container 42 is software which is designed to operate with objects which have interactive capabilities. In one embodiment, the real-time interactive control and communication software objects 40 are ActiveX control objects, and the container 42 is Microsoft Visual Basic. In other embodiments the container 42 may be Microsoft Internet Explorer which runs an HTML page, or ICONICS GraphWorX32, or Netscape Communicator which run an HTML page. Internet Explorer is a web browser manufactured by Microsoft Corporation, Netscape Communicator is a web browser manufactured by the Netscape Corporation, and GraphWorX32 is a software product of ICONICS Inc. used for Human/Machine Interfaces ("HMI"). A real-time interactive control and communication software object 40 may give rise to one or more exemplars of the Active X control, which are called instances 41. As is familiar to those of ordinary skill in the art, these instances 41 are embedded into the container 42. Embedding as used herein denotes particularly making the real-time interactive control and communication software object 40 functional as a control through the intermediation of the container application 42, and includes the possible utilization of one or more additional software files.

In the Advisory Action dated November 10, 2005 (item 11, no. 4), the Examiner further states, "Elsbree discloses software objects extended from general-purpose software objects [i.e. instance object] [col 6, lines 16-67; and col 10, lines 18-23]." However, these further cited portions of *Crawford* merely mentions that two dynamic link libraries are employed to complete the interconnection of the control object 40 to an OPC server (col. 6: 40-67) and mentions an object type GwxDisplay 230 that exposes methods for creating and getting existing instances of visible and dynamic objects.

There is no mention by *Elsbree* of any "application tier coupled to the web tier" or any type of "**on-line procurement of telecommunications offerings**" as recited by claim 1. Moreover, neither *Crawford* nor *Elsbree*, nor any combination thereof, discloses or suggests "the web tier or the application tier includes software objects extended from general-purpose software objects **to support procurement of the telecommunications offerings on-line**" as recited by claim 1.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner has failed to meet this burden.

Further, the Examiner (Office Action dated August 10, 2005, pp. 3-4) asserts, “It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Elsbree and Crawford because both deal with software integration for telecommunication services. Furthermore, the teachings of Elsbree to allow software objects from the general-purpose software objects to support procurement of the telecommunications offerings online would improve the functionality of Crawford’s system by allowing the objects to carry additional information for product collection and distribution.” This assertion by the Examiner has no technical merit, as neither reference has anything to do with “telecommunications services,” much less any type of **“on-line procurement of telecommunications offerings,”** and furthermore, there is no apparent motivation or reasoning shown for *Crawford’s* system to allow “objects to carry additional information for product collection and distribution” as asserted by the Examiner.

In the Advisory Action dated November 10, 2005 (item 11, no. 5), the Examiner modifies the supposed motivation to combine the references, stating, “it would have been obvious to

combine the teaching of Crawford and Elsbree because Elsbree's teaching of instance objects would allow the system to reuse existing codes and dynamically create additional objects in a quicker and efficient manner," apparently relying on the Examiner's assertion of "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *in re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *in re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)." However, there is no need established by any portion of *Crawford* for reuse of "existing codes" or for dynamically creating "additional objects in a quicker and efficient manner" as urged by the Examiner.

Obviousness rejections require some evidence in the prior art of a teaching, motivation, or suggestion to combine and modify the prior art references. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000); *In re Dembicza*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983). A prior art reference must be considered in its entirety including portions that would lead away from the

claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

If a proposed modification would render the prior art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Therefore, the rejection should be reversed. For reasons similar to those discussed with regard to claim 1, the rejection of independent claims 20 and 40 should also be reversed.

2. Dependent claims 2, 4, 21, and 23 are not obvious over Crawford in view of Elsbree.

Dependent claims 2, 4, 21, and 23 are allowable for at least the same reasons as their respective independent claims, and are separately patentable on their own merits. For example, dependent claim 2 recites, "wherein the web tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects," which the Examiner (Office Action dated August 10, 2005, p. 4, item 10) contends is taught by *Crawford* at col. 16: 57 – col. 17: 5 and col. 35: 24-34. However, col. 16: 57 – col. 17: 5 of *Crawford* mentions that the "data link 150 may comprise up to three different "layers" of connection: the first layer or sub-link connects host computer 104 to switching station 124a; the second "layer" connects switching station 124a to switching station 124b; and the third "layer" connects switching station 124b to a customer computer 50," as discussed previously. At col. 35: 24-34, *Crawford* mentions allowing a customer to change a default configuration, permitting the customer computer 50 to access information in the on-line service control data table 501, and routine 506 updates the on-line service control data table 501, and then redirects the processor interrupts by loading new interrupt handlers into the processor memory 66 (col.35:

25-42), which has no apparent relevance to the data link “layers” of connection, nor to the “web tier” as recited by claim 2.

Dependent claim 4 recites, “wherein the application tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.” The Examiner (Office Action dated August 10, 2005, p. 4, item 12) cites the same portions of *Crawford* in its rejection of claim 4 as is used in the rejection of claim 2. Appellants respectfully submit that independent claim 1, from which claims 2 and 4 depend, recites, “an application tier coupled to the web tier and configured to perform order management, online ordering or user management functions,” which is clearly not disclosed or suggested by the portions of *Crawford* cited by the Examiner. Unless the patent otherwise provides, a claim term cannot be given a different meaning in the various claims of the same patent. *Georgia Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1331, 52 USPQ2d 1590, 1598 (Fed. Cir., Nov. 1, 1999); see also *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579, 34 USPQ2d 1673, 1679 (Fed. Cir. 1995) (holding that claim term found in different claims must be interpreted consistently); *Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627, 632, 3 USPQ2d 1109, 1113 (Fed. Cir. 1987) (holding that a term used in one claim had the same meaning in another claim).

Furthermore, as discussed previously, there is no apparent relevance of the cited customer change of a default configuration with the cited data link “layers” of connection, nor to the “application tier” as recited by claim 4.

Thus, the rejections of claims 2, 4, 21, and 23 should be reversed.

3. **Dependent claims 3, 5, 22, and 24 are not obvious over *Crawford* in view of *Elsbree*.**

Dependent claims 3, 5, 22, and 24 are allowable for at least the same reasons as their respective independent claims, and are separately patentable on their own merits. For example, dependent claim 3 recites, “wherein the web tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects,” which the Examiner (Office Action dated August 10, 2005, p. 4, item 11) contends is taught by *Crawford* at col. 16: 57 – col. 17: 5 and col. 35: 24-34. However, col. 16: 57 – col. 17: 5 of *Crawford* mentions that the “data link 150 may comprise up to three different “layers” of connection: the first layer or sub-link connects host computer 104 to switching station 124a; the second “layer” connects switching station 124a to switching station 124b; and the third “layer” connects switching station 124b to a customer computer 50,” as discussed previously. At col. 35: 24-34, *Crawford* mentions allowing a customer to change a default configuration, permitting the customer computer 50 to access information in the on-line service control data table 501, and routine 506 updates the on-line service control data table 501, and then redirects the processor interrupts by loading new interrupt handlers into the processor memory 66 (col.35: 25-42), which has no apparent relevance to the data link “layers” of connection, nor to the “web tier” as recited by claim 3.

Dependent claim 5 recites, “wherein the application tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.” The Examiner (Office Action dated August 10, 2005, p. 4, item 13) cites the same portions of *Crawford* in its rejection of claim 5 as is used in the rejection of claim 3. Appellants respectfully submit that independent claim 1, from which claims 3 and 5 depend, recites, “an application tier coupled to the web tier and configured to perform order management,

online ordering or user management functions,” which is clearly not disclosed or suggested by the portions of *Crawford* cited by the Examiner. Furthermore, as discussed previously, there is no apparent relevance of the cited customer change of a default configuration with the cited data link “layers” of connection, nor to the “application tier” as recited by claim 5.

Thus, the rejections of claims 3, 5, 22, and 24 should be reversed.

4. Dependent claims 6-19 and 25-39 are not obvious over Crawford in view of Elsbree.

Dependent claims 6-19 and 25-39 are allowable for at least the same reasons as their respective independent claims, and are separately patentable on their own merits.

The rejection of claims 1-40 must be reversed, because *Crawford* and *Elsbree* do not suggest or disclose the limitations of the claims.

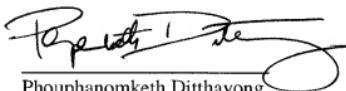
VIII. CONCLUSION AND PRAYER FOR RELIEF

For the foregoing reasons, Appellants request the Honorable Board to reverse each of the Examiner’s rejections.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

3/8/07
Date



Phouphanomketh Diththavong
Attorney for Applicant(s)
Reg. No. 44,658

918 Prince Street
Alexandria, VA
Tel. 703-519-9952
Fax. 703-519-9958

IX. CLAIMS APPENDIX

1. (Previously Presented) A system for providing software integration for on-line procurement of telecommunications offerings, comprising:
 - a web tier configured to receive a request or a user action from a web server; and
 - an application tier coupled to the web tier and configured to perform order management, online ordering or user management functions,

wherein the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications offerings on-line and custom software objects created to support procuring of the telecommunications offerings on-line.
2. (Previously Presented) The system of claim 1, wherein the web tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.
3. (Previously Presented) The system of claim 1, wherein the web tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.
4. (Previously Presented) The system of claim 1, wherein the application tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.
5. (Previously Presented) The system of claim 1, wherein the application tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.
6. (Previously Presented) The system of claim 1, wherein the web tier includes a back office portal including the custom software objects and configured to provide to the web server

context-sensitive contact information, callback forms, help center information, or requests for inventory.

7. (Previously Presented) The system of claim 1, wherein the web tier includes a customer portal including the extended software objects and configured to provide to the web server customer order information, customer support information, or customer order status information, wherein the extended software objects include software objects extended from software objects included in a generic architecture, extended to support ordering telecommunications services or products.

8. (Previously Presented) The system of claim 1, wherein the application tier includes an order management function for providing to the web tier the context-sensitive contact information, callback forms, help center information, or requests for inventory.

9. (Previously Presented) The system of claim 1, wherein the application tier includes an online ordering function for providing online ordering functionality to the web tier.

10. (Previously Presented) The system of claim 1, wherein the application tier includes a user management function for providing user management functionality to the web tier.

11. (Previously Presented) The system of claim 1, further comprising a database tier coupled to the web tier or the application tier and configured to persist data, store objects or store tables.

12. (Previously Presented) The system of claim 11, wherein the web tier or the application tier is configured to generate custom tables to extend a schema of tables.

13. (Previously Presented) The system of claim 12, wherein the web tier or the application tier is configured to map the custom tables to the extended software objects or the custom software objects.

14. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to an order domain configured to support an order class.

15. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a fulfillment status domain configured to provide order fulfillment functionality.

16. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a move, change or disconnect (MCD) domain configured to store summary information of operational support system (OSS) order entry and status applications.

17. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to an order activity domain configured to carry out business logic or application logic for order management events involving persistence, transaction-sensitive data retrieval or specialized business logic.

18. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a helpers domain configured to create domain objects, perform specialized business logic or perform persistence of domain objects.

19. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a customer support domain configured to provide storage for information needed to retrieve an appropriate set of contact information for back office personnel.

20. (Previously Presented) A method for providing software integration for on-line procurement of telecommunications offerings, comprising:

receiving a request or a user action from a web server in a web tier;

performing order management, online ordering or user management functions in an application tier;

extending software objects from general-purpose software objects in the web tier or the application tier to support procuring of the telecommunications offerings on-line; and

creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line.

21. (Previously Presented) The method of claim 20, further comprising reconfiguring software objects that are included in the web tier and that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.

22. (Previously Presented) The method of claim 20, further comprising creating custom objects that are included in the web tier and that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.

23. (Previously Presented) The method of claim 20, further comprising reconfiguring software objects that are included in the application tier and that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.

24. (Previously Presented) The method of claim 20, further comprising creating custom objects that are included in the application tier and that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.

25. (Previously Presented) The method of claim 20, further comprising including in the web tier a back office portal including the custom software objects and providing to the web server context-sensitive contact information, callback forms, help center information, or requests for inventory.

26. (Previously Presented) The method of claim 20, further comprising including in the web tier a customer portal including the extended software objects and configured to provide to the web server customer order information, customer support information, or customer order status information.

27. (Previously Presented) The method of claim 20, further comprising including in the application tier an order management function for providing to the first layer context-sensitive contact information, callback forms, help center information, or requests for inventory.

28. (Previously Presented) The method of claim 20, further comprising including in the application tier an online ordering function for providing online ordering functionality to the web tier.

29. (Previously Presented) The method of claim 20, further comprising including in the application tier a user management function for providing user management functionality to the web tier.

30. (Previously Presented) The method of claim 20, further comprising persisting data, storing objects or storing tables in a database tier coupled to the web tier or the application tier.

31. (Previously Presented) The method of claim 30, further comprising generating custom tables to extend a schema of tables in the web tier or the application tier.

32. (Previously Presented) The method of claim 31, further comprising mapping the custom tables to the extended software objects or the custom software objects in the web tier or the application tier.

33. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in an order domain to support an order class.

34. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a fulfillment status domain to provide order fulfillment functionality.

35. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a move, change or disconnect (MCD) domain to store summary information of operational support system (OSS) order entry and status applications.

36. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in an order activity domain to carry out business logic or application logic for order management events involving persistence, transaction-sensitive data retrieval or specialized business logic.

37. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a helpers domain to create domain objects, perform specialized business logic or perform persistence of domain objects.

38. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a customer support domain to provide storage for information needed to retrieve an appropriate set of contact information for back office personnel.

39. (Previously Presented) A computer-readable medium storing computer-executable instructions for performing the steps recited in claim 20.

40. (Previously Presented) A system for providing software integration for on-line procurement of telecommunications offerings, comprising:

means for receiving a request or a user action from a web server in a web tier;

means for performing order management, online ordering or user management functions in an application tier;

means for extending software objects from general-purpose software objects in the web tier or the application tier to support procuring of the telecommunications offerings on-line; and

means for creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line.

X. EVIDENCE APPENDIX

Appellants are unaware of any evidence that is required to be submitted in the present Evidence Appendix.

XI. RELATED PROCEEDINGS APPENDIX

Appellants are unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.